



Serial No. 09/358,940

IN THE CLAIMS:

Please note that all claims currently pending and under consideration in the referenced application are shown below, in clean form, for clarity. Claim 1 has been amended.

E1
1. (Amended four times) An etchant solution which selectively etches borophosphosilicate glass over tetraethyl orthosilicate, said etchant solution comprising an organic acid and a fluoride-containing solution provided in a selected volumetric ratio relative to one another, wherein the selected volumetric ratio of the organic acid to the fluoride-containing solution is about 10:1 to about 500:1.

E2
2. The etchant of claim 1, wherein said organic acid is selected from the group consisting of acetic acid, formic acid, and oxalic acid.

3. The etchant of claim 1, wherein said fluoride-containing solution is selected from the group consisting of hydrofluoric acid and ammonium fluoride.

E3
4. (Amended) The etchant of claim 1, wherein said organic acid comprises glacial acetic acid and said fluoride-containing solution comprises 49% hydrofluoric acid by weight in water.

6. (Amended) The etchant of claim 4, wherein said acetic acid is in a volumetric ratio with said hydrofluoric acid at about 10:1 to about 100:1.

E4
7. (Amended) The etchant of claim 1, wherein said organic acid comprises glacial acetic acid and said fluoride-containing solution comprises 40% ammonium fluoride by weight in water.

8. (Amended) The etchant of claim 1, wherein said etchant solution exhibits a selectivity ratio of borophosphosilicate glass to tetraethyl orthosilicate between about 27:1 and 55:1.

9. An etchant solution which selectively etches borophosphosilicate glass over tetraethyl orthosilicate, said etchant solution comprising an organic acid and a fluoride-containing solution, wherein the etchant solution exhibits a selectivity ratio of borophosphosilicate glass to tetraethyl orthosilicate between about 27:1 and 55:1.

10. The etchant of claim 9, wherein the organic acid is selected from the group consisting of acetic acid, formic acid, and oxalic acid.

11. The etchant of claim 9, wherein the fluoride-containing solution is selected from the group consisting of hydrofluoric acid and ammonium fluoride.

12. The etchant of claim 9, wherein the organic acid comprises glacial acetic acid and the fluoride-containing solution comprises 49% hydrofluoric acid by weight in water.

13. The etchant of claim 12, wherein the acetic acid is in a volumetric ratio with the hydrofluoric acid at about 1:1 to about 500:1.

14. The etchant of claim 12, wherein the acetic acid is in a volumetric ratio with the hydrofluoric acid at about 10:1 to about 100:1.

15. The etchant of claim 9, wherein the organic acid comprises glacial acetic acid and the fluoride-containing solution comprises 40% ammonium fluoride by weight in water.